

PRODUCT INFORMATION

Metric & SI unit

Acetal Copolymer
KEPITAL®

KOREA ENGINEERING PLASTICS CO.,LTD.

TE-21

A medium viscosity grade for general injection molding. It was modified with elastomer, and suitable for parts requiring much higher impact resistance and toughness.

Property	Test Method	Units	Value
Physical			
Specific Gravity	ASTM D792	—	1.39
Water Absorption 23℃, 60%RH	ASTM D570	%	0.22
Thermal			
Melt Index 190℃, 2.16 kg	ASTM D1238	g/10min	11.0
Melting Point 10℃/min	ASTM D3418	℃	165
Heat Deflection Temperature 4.6kg _f /cm ² (0.5MPa)	ASTM D648	℃	100
18.6kg _f /cm ² (1.8MPa)			13
Coeff. of Linear Thermal Expansion 20~80℃	ASTM D696	x 10 ⁻⁵ cm/cm/℃	13
Flammability t 0.8mm	UL94	—	HB
Mechanical			
Tensile Strength 23℃	ASTM D638	kg _f /cm ² (MPa)	545 (53)
Tensile Elongation 23℃	ASTM D638	%	130
Weld Elongation 23℃	ASTM D638	%	20
Flexural Strength 23℃	ASTM D790	kg _f /cm ² (MPa)	770 (76)
Flexural Modulus 23℃	ASTM D790	x 10 ⁴ kg _f /cm ² (MPa)	2.25 (2,206)
Notched Izod Impact Strength t 3.2mm	ASTM D256	kg _f · cm/cm (J/m)	10.5 (103)
Electrical			
Dielectric Constant 10 ⁶ Hz	ASTM D150	—	-
Dielectric Dissipation Factor 10 ⁶ Hz	ASTM D150	—	-
Surface Resistivity	ASTM D257	Ω	1 x 10 ¹⁶
Volume Resistivity	ASTM D257	Ω · cm	1 x 10 ¹⁴
Dielectric Strength	ASTM D149	kV/mm	-
Molding Shrinkage (//Direction) t2mm, Φ 100mm		%	1.5



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Metric & US unit

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A medium viscosity grade for general injection molding. It was modified with elastomer, and suitable for parts requiring much higher impact resistance and toughness.

Property	Test Method	Units	Value
Physical			
Specific Gravity	ASTM D792	—	1.39
Water Absorption 23℃(73°F), 60%RH	ASTM D570	%	0.22
Thermal			
Melt Index 190℃, 2.16 kg	ASTM D1238	g/10min	11.0
Melting Point 10℃/min	ASTM D3418	℃ (°F)	165 (329)
Heat Deflection Temperature 4.6kg _f /cm ² (64psi)	ASTM D648	℃ (°F)	100 (212)
18.6kg _f /cm ² (264psi)			
Coeff. of Linear Thermal Expansion 20~80℃	ASTM D696	x 10 ⁻⁵ cm/cm/℃	13
Flammability t 0.8mm(t 0.03in)	UL94	—	HB
Mechanical			
Tensile Strength 23℃(73°F)	ASTM D638	kg _f /cm ² (psi)	545 (7,752)
Tensile Elongation 23℃(73°F)	ASTM D638	%	130
Weld Elongation 23℃(73°F)	ASTM D638	%	20
Flexural Strength 23℃(73°F)	ASTM D790	kg _f /cm ² (x 10 ³ psi)	770 (11.0)
Flexural Modulus 23℃(73°F)	ASTM D790	x 10 ⁴ kg _f /cm ² (x 10 ⁴ psi)	2.25 (32.0)
Notched Izod Impact Strength t 3.2mm (t 0.126in)	ASTM D256	kg _f · cm/cm(ft · lb/in)	10.5 (1.9)
Electrical			
Dielectric Strength 10 ⁶ Hz	ASTM D150	—	—
Dielectric Dissipation Factor 10 ⁶ Hz	ASTM D150	—	—
Surface Resistivity	ASTM D257	Ω	1 x 10 ¹⁶
Volume Resistivity	ASTM D257	Ω · cm	1 x 10 ¹⁴
Dielectric Strength	ASTM D149	kV/mm	—
Molding Shrinkage (//Direction) t2mm, Φ 100mm		%	1.5

